

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: An AIMD simulation trajectory of bulk water at 270 K and 5.0 V nm⁻¹ (bulk_5v.avi).

File Name: Supplementary Movie 2

Description: An AIMD simulation trajectory of bulk water at 270 K and 10.0 V nm⁻¹ (bulk_10v.avi).

File Name: Supplementary Movie 3

Description: An AIMD simulation trajectory of ice χ at 100 K and 5.0 V nm⁻¹ (ice_5v.avi).

File Name: Supplementary Movie 4

Description: An AIMD simulation trajectory of ice χ at 100 K and 10.0 V nm⁻¹ (ice_10v.avi).

File Name: Supplementary Movie 5

Description: A classical MD simulation trajectory of the liquid to solid phase transition for ice χ (chi.avi).

File Name: Supplementary Movie 6

Description: A classical MD simulation trajectory of the liquid to solid phase transition for polar ice B (polarB.avi).